Intermontanus

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NEWS & ANNOUNCEMENTS

THE MISSING LEAP: FROGS AND TOADS ARE DISAPPEARING

By Cheri Privor. *Reprinted* from *USA Today, 4 January 1993 Submitted by David Jensen.*

Frogs, toads and other amphibians -- around since the time of the dinosaurs -- are mysteriously disappearing at alarming rates, scientists say.

"There seems to be something affecting these amphibians, and we don't know what it is," says Bruce Bury, research zoologist with the U.S. Fish and Wildlife Service.

Indeed, the mystery surrounding these vanishing amphibians has so alarmed scientists that an international task force has been formed to assess the worldwide phenomenon and come up with some plausible explanations.

One reason for concern: Declines in amphibian populations may be an early sign of environmental problems worldwide.

"It does indicate a lot about our environment as a whole," said Janalee Caldwell, assistant curator of amphibians at the Oklahoma Museum of Natural History in Norman

Though scientists do not yet have statistical proof of the amphibian decline, they have overwhelming anecdotal evidence. Among the examples:

✓The Western toad population has dropped 80% over the past fifteen years. The toad once roamed wilderness areas and national parks throughout the Rocky Mountains.

✓ The Cascade frog once frequented 50 ponds in the California-Nevada area. Last year, just two were found.

✓The Wyoming toad has been afflicted by red-leg disease - an infection that causes legs to turn red and puffy and the immune system to gradually collapse. The cause is unknown. Since an early fall census, one quarter of the 162 known toads have died, bringing the species perilously close to extinction.

✓The Eastern spadefoot toad, the Northern leopard frog, and the Illinois chorus frog may be headed to the endangered species list because of recent population drops.

✓ In the Southwest, the flatwood salamander has disappeared to the point that it is a candidate for the endangered list. The region's striped newt and gopher frog soon may face the same fate, scientists say.

Similar observations have been made around the globe.

Though scientists are sure there's a problem, they are uncertain about the reasons. Possible explanations:

✓In the Northeast, acid rain polluting lakes and ponds may be contributing to The demise of amphibians.

✓Habitat destruction -- such as clear-cutting -- in the Pacific Northwest may be displacing some of the species.

✓Stocking of bullfrogs and bass in some California rivers and lakes may be crowding out less hardy species.

✓Worldwide, scientists also wonder whether decreases in the atmospheric ozone layer has increased the amount of ultraviolet light enough to be killing smaller species.

So far, scientists don't agree on a single thesis.

"Science moves slowly, and we are cautious," says Bury, who believes multiple factors are responsible.

Others suggest that it will take more research to see whether the trend is part of a natural decline and recovery cycle. "We just don't have enough data," Caldwell says.

Furthermore, some say determining whether extinction is natural or induced by mankind is difficult because not much is known about the biology and behavior of most species. So what may look like extinction could be temporary absence due to hibernation or normal dormancy.

"Some years, they just seem to disappear completely, and then they just show up again later. It's some function of amphibian biology," says John Carr, a scientist at Conservation International in Washington D.C.

But he believes the signs aren't good. "Over the past three years none have appeared, and there is no obvious difference in the environment," he says. "They seem to be gone. "

ANNUAL AMPHIBIAN COUNT

As you can see from the *USA Today* article above, there is great need for monitoring amphibian populations. The second annual amphibian count will be held April 23-24. If you participated last year, try to go to the same areas again this year If you are new to the count, any area will be fine. All the data will be sent to the Society for the Study of Amphibians and Reptiles and incorporated into an international database of amphibian populations. Enclosed is a copy of the survey form. If you have any questions about the form or the survey let me know. Amphibian sightings for the international database are not limited to the time period of the annual count. In fact, all amphibian sightings can be recorded on the survey form and incorporated into the database.

It is important that we contribute to the international database for the simple reason that so little is known about Utah's amphibian population. For example, the boreal toad (*Bufo boreas*) used to be quite common in parts of Utah, but today you're lucky to find one. *Bufo boreas is* considered a Candidate species for federal protection in Colorado, New Mexico, and Wyoming, but not in Utah. The reason for this is that so little is known about Utah amphibian populations. Your amphibian sightings are important, so please contribute any amphibian sightings you have (preferably on the SSAR form enclosed).

WASHINGTON COUNTY'S HABITAT CONSERVATION PLAN

Washington County has submitted a final draft of a habitat conservation plan (HCP) to the U.S. Fish & Wildlife Service for review. I have read the HCP and suspect the USFWS will recommend some changes before they will accept the plan.

The HCP is required by the USFWS before Washington County can legally destroy protected species or their habitat. Currently there are seven endangered or threatened species and 39 candidate species in Washington County included in the HCP. The desert tortoise (*Gopherus agassizii*) is the primary focus of the HCP and a Core Protection Zone is planned to protect the tortoise in a reserve type setting. Updates will be forthcoming.

HERPETOLOGY ONLINE NETWORK

The Herpetology Online Network, Philadelphia, PA, has installed high-speed access for 9600/14,400/38,000 bps V. 32, V. 42bis modems on the number (215) 698-1905. Standard speeds of 300-2400 bps should continue to access Herp-Net via the phone number (215) 4643562.

The Herpetology Online Network (Herp-Net) is a computer information network serving herpetologists, veterinarians, hobbyists, conservationists, and others interested in amphibians and reptiles. Any communicating computer or terminal can access Herp-Net by direct dial 24 hours per day.

News, submissions or information requests may also be faxed to (215) 464-3561 or mailed on I BM disks or paper to: Mark Miller, Systems Administrator, Herpetology Online Network, P.O. Box 52261, Philadelphia PA 19115

Reprinted from Herp Beat, the newsletter of the Upstate (New York) Herpetological Association, as printed in Idaho Herp News

THE HERPS ARE ACTIVE

Recently I was in St. George for meetings on two consecutive Fridays. On 26 February, I found a side-blotched lizard (*Uta stansburiana*), active in air temperatures of 56°F and a desert tortoise (*Gopherus agassizii*) in a den. The next Friday, March 5th, several *U. stansburiana* were active, the *G agassizii* had been out of the den but was not seen, and best of all a baby Mojave rattlesnake (*Crotalus scutulatus*) was out. The rattlesnake was born last year and was active at 5:00 pm in the shade next to some old tortoise dens.

In anticipation of this year's herp viewing season our next meeting will consist of several slide shows. If you have any pictures that you would like to share, bring them to the meeting. The only requirement is that the slides are herp related, not necessarily Utah herps. The meeting will be held at 7:00 pm, March 31 in room 212 of the U of U Biology Building.

ARCHIVES OF UTAH HERPETOLOGICAL SOCIETIES

Back when UtAH was first established, some of the past presidents of the Utah Herpetologists League and Utah Herpetological Society sent us copies of many of their publications. Now I am trying to compile a complete set of Utah herpetological society publications so people will have access to to them. Listed below are the publications we have. If you have any additional publications please let me know so I can arrange to get a copy of them. Anyone interested in obtaining a copy of some or all of the publications on file please let me know.

1974
- Utah Herp. League Journal. vol.1 no.1 (complete)

1975
- Utah Herp. League Journal. vol.2 no 2 (pages 13-22)
- Utah Herp. League, Herp Newz vol 2 no 3

1977
- Utah Herp. League, A joint correspondence to UHL members and SSAR
- Utah Herp. Society, (Newsletter) 14 December

1978
- Utah Herp. Society, (Newsletter) 24 January
- Utah Herp. Society, (letter to SSAR) 6 February
- Utah Herp. Society, (Newsletter) 15 February
- Utah Herp. Society, (letter to SSAR) 19 February
- Utah Herp. Society, (Newsletter) 1 May
- Utah Herp. Society, (Newsletter) 25 May
- Utah Herp. Society, Newsletter July
- Utah Herp. League News. September?
- Utah Herp. League, (Newsletter) October?

1979
- Utah Herp League, (Newsletter) January
- Utah Herp. League, (Newsletter) 18 January
- Utah Herp. League. Constitution and Bylaws
- Utah Herp. League, (Newsletter) February?
- Utah Herp. League Constitution and Bylaws. March
- Utah Herp. League, (Newsletter) March
- Utah Herp. League, (Newsletter) 1 April
- Utah Herp. League, (Newsletter) May
- Utah Herp. League, (Newsletter) June
- Utah Herp. League, (Newsletter) September?
- Utah Herp. League, (Newsletter) December

1980
- Utah Herp League, (Newsletter) January
- Utah Herp. League, Herp Newz. February
- Utah Herp. League, (Newsletter) March
- Utah Herp. League, (Newsletter) 18 April
- Utah Herp League, (Newsletter) May
- Utah Herp. League, (Newsletter) 21 May
- Utah Herp. League, (Newsletter) 30 July
- Utah Herp. Society, (Newsletter) December

1981
- Utah Herp Society, (Newsletter) 23 February
- Utah Herp. Society, (Newsletter) March?
- Utah Herp. Society, (Newsletter) 1 April
- Utah Herp. Society, (Newsletter) May
- Utah Herp. Society News. June
- Utah Herp Society, (Newsletter) July
- Utah Herp. Society News July
- Utah Herp. Society, (Newsletter) August
- Utah Herp. Society, (Newsletter) September
- Utah Herp Society News November
- Utah Herp Society News December

1982
- Utah Herp. Society News January

1983
- Utah Herp Society Newsletter January
- Utah Herp. Society Newsletter February
- Utah Herp Society Newsletter March
- Utah Herp. Society Newsletter April
- Utah Herp. Society Newsletter July

In honor of the past Utah herp societies, many of you may remember to "snub St Patrick's Day ." For those of you that do not remember, an article from the Salt Lake Tribune (March 19, 1983) may explain:

St. Patrick Not in the Hearts of Herpetological Society. As legend has it, St Patrick chased all the snakes out of Ireland.

Utah Association of Herpetologists

Intermontanus
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Assistant Editor: Cynthia Lleyson

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Send correspondence to UtAH,
195 West 200 North, 84321-3905
(801) 752-0297.

And for that bit of ecological manipulation, the patron saint of Ireland has won the good humored scorn of the Utah Herpetological Society.

While many people celebrated the "wearin' o' the green" Thursday, the Herpetological Society members wore black paper shamrocks at the third annual Snub St. Patrick's Day festival.

Grave Injustice to Ireland

"Although we admire what St. Patrick did religiously, ecologically we think he did a grave disservice to Ireland," said Eldon Romney.

He added there is no evidence St. Patrick actually chased snakes from Ireland. It is however, a good excuse for herpetologists to get together.

About 20 members of the Herpetological Society met at Redwood Multi-purpose Center, 3060 Lester, on St. Patrick's day for the traditional Herpetological Society contests.

St. Patrick as a Dart Board

The fang throw, in which contestants chuck darts at an effigy of St. Patrick was won by Larry Ujhely, West Valley City.

The slithering-like-a-snake race, described by Mr. Romney as "rug bums in the name of glory," was divided into three categories. The concertina (a coiling method snakes use to climb trees) method was done fastest by Gary Jensen, West Valley City. The rectilinear crawl, which is similar to a caterpillar's movement, was won by Darrell Hodges, West Valley City. The fastest sidewinder in the society was Tom Ashman, West Valley City.

The eating-like-a-snake race, in which contestants try to eat a string of licorice without using their hands, was won by John Fox, Chief investigator for the Humane Society....

FEATURES

INTERPRETING THE UTAH AMPHIBIAN AND REPTILE REGULATIONS (R608-3)

In 1989 The Utah Division of Wildlife Resources updated the regulations concerning the collection, importation, transportation, and subsequent possession of zoological animals. These new regulations combined all species of vertebrates and the crustaceans and aquatic insects into a single document. The combining of these groups has many advantages, however, because of the length and organization many people do not bother to read the regulations. As a result many people misunderstand the current laws or do not know what they are.

Actually the regulations are quite simple. First, there are three categories of protection; **Prohibited** and **Controlled** species may not be collected without a certificate of registration (COR) and **Noncontrolled** species which may be collected as per the regulations without a COR. Second, there are two primary activity categories; **Collection,** the taking of species occurring in Utah and **Importation** of species into Utah. Other categories include transportation and other uses, but will not be discussed here.

Three definitions are important to understanding the intent of the regulations (other definitions are included but will not be presented here).

Collect: For purposes of R608-3 only, collect includes pursuing, catching, or capturing within the state of Utah, and subsequently possessing zoological animals for personal, commercial or scientific and educational uses with no intention of abandoning, allowing to deteriorate or using in a manner not normally associated with beneficial uses of the species involved. This definition includes killing.

Commercial use: For purposes of R608-3 only, commercial use includes activities through which the person in possession of an animal expects to recover all or part of the costs of keeping the animal through selling, bartering, trading, exchanging, breeding or otherwise utilizing the animal. Lecturing, exhibiting or displaying animals for a fee is not a commercial use if annual receipts are less than one thousand dollars.

This definition includes such things as giving a noncontrolled species to a friend who often gives you animals, or anything else. For example, It is illegal to give a Utah species to a friend in Kansas who occasionally gives you animals or who you expect will return the favor.

Import: For purposes of R608-3 only, import includes bringing or causing zoological animals to be brought into Utah by any means and their subsequent possession.

Now as far as the collection of amphibians in Utah goes Any number of tiger salamanders (*Ambystoma tigrinum*), bullfrogs (*Rana catesbeiana*), and green frogs (*Rana clamitans*) may be collected. No spotted frogs (*Rana pretiosa*), Arizona toads (*Bufo microscaphus*), or Pacific treefrogs (*Pseudacris* [=*Hyla*] *regilla*) may be collected. Three or fewer individuals of all other species may be collected and/or possessed during any six month period. This means that if you collect two individuals one year and keep them in captivity the next year you can only collect enough to bring your total to three. It also means that if you killed three individuals you may not collect or possess any more for six months. Generally, given the apparent population declines, amphibians should not be collected at all.

The collection of reptiles is basically the same as amphibians, except all noncontrolled reptiles become controlled once you collect or possess three in any six month period. For both amphibians and reptiles, you must apply for a COR if your total number of a noncontrolled species/subspecies exceeds three (i.e.; if you breed them).

The importation of amphibians and reptiles is generally the same as collection. You may import three or fewer of the designated noncontrolled species without a COR. However, if your total number exceeds three you must apply for a COR. For example, if you collected three rubber boas *(Charina bottae)* in Utah, you may not import any without a COR (until six months after you no longer possessed them). Finally, some species are afforded different categories under collection and importation The bullfrog is one of these, you may collect as many as you wish, but you may not import them without a COR. In addition many non-Utah species are prohibited from importation.

There is a typo in the controlled reptile importation section. For a correction see *Intermontanus* 1 (1):3.

I know of a few people that believe there are loop-holes in the law and perpetrate illegal acts. If you read the laws thoroughly you'll find your plan is covered, if not explicitly, by the intent.

If you have any questions feel free to contact me or I'm sure the UDWR would be willing to answer any questions.

It should be noted that the above is my interpretation of the regulations and may not be accurate. The above is definitely not complete and you should read the laws before collecting, importing, or transporting any animals in the state. Remember one illegal herper makes us all look bad.

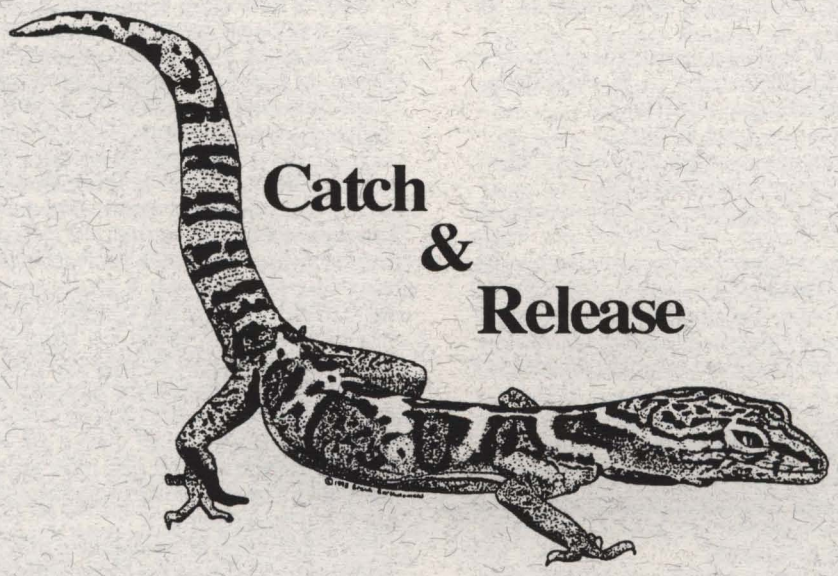
Note: If you did not receive a copy of the regulations with this issue it is because I ran out of them. You can obtain one from the Utah Division of Wildlife Resources, 1596 W. North Temple, Salt Lake City, UT 84116, (801) 583-4700.

Submitted by Breck Bartholomew,195 West 200 North, Logan UT 84321 -3905

UTAH MEETING:

Slide "show and tell", bring some slides if you want. Join us at **7:00 pm, March 31** in room 212 of the U of U Biology Building.

Note: A few people still haven't paid this year's dues. This will be your last issue.



Utah Association of Herpetologists
195 West 200 North
Logan UT 84321-3905

Printed on Recycled Paper

AMPHIBIAN POPULATION SURVEY

Country _____
State _____
County _____
Locality _____
_____

Date _____
Area latitude/longitude _____
_____
Surveyor name _____
Time (24 hr) _____

Weather previous 24 hrs:

Temperature
____unseasonably warm
____unseasonably cold
____normal

Moisture
____unseasonably wet
____unseasonably dry
____normal

CODES **A =Adult** **J=Juvenile** **L = Larvae** **E=Eggs**	*Ambystoma tigrinum*	*Bufo boreas*	*Bufo cognatus*	*Bufo microcephus*	*Bufo punctatus*	*Bufo woodhousii*	*Hyla arenicolor*	*Pseudacris regilla*	*Pseudacris triseriata*	*Rana catesbiana*	*Rana clamitans*	*Rana onca*	*Rana pipiens*	*Rana pretiosa*	*Spea bombifrons*	*Spea intermontana*	*Spea multiplicata*	*Rana yavapaiensis*													
Total number seen(add letter E if # is estimate																															
Calling? (Y/N)																															
Amplexing or copulating pairs present?																															
HABITAT DATA																															
Aquatic																															
perennial stream																															
perennial river																															
intermittent stream																															
intermittent river																															
ditch																															
natural lake																															
reservoir																															
pond or marsh on a:																															
floodplain																															
upland																															
bog																															
seasonally flooded lowland																															
spring or rock seep																															
Terrestrial																															
upland																															
mountain top																															
hilltop																															
on slope																															
lowland																															
floodplain																															
non-alluvial valley																															

Air temp._____ **F°OR C°** **pH:**
Water temp._____ **F° OR C°** **water**_____
soil_____
Nearby land characteristics:

crops _____ livestock pasture _____ woodland _____ town _____ industrial _____ desert _____

Tiger Salamander, *Ambystoma tigrinum*: Statewide; Only salamander native to Utah; color varies from drab olive with black & white mottling to black with yellow markings.

Western Toad, *Bufo boreas*: Mountains down the center of Utah; lacks cranial crests; white dorsal stripe; well developed tarsal fold.

Great Plains Toad, *Bufo cognatus*: Southeastern Utah from about Price down; pale-bordered dark blotches; in symmetrical pairs on its back; cranial crests present.

Southwestern Toad, *Bufo microscaphus*: Southwestern Utah; light stripe across head including eye-lids; cranial crests weak or absent.

Red-spotted Toad, *Bufo punctatus*: Southern to Southeastern Utah; round glands roughly the same size of the eye.

Woodhouse's Toad, *Bufo woodhousii*: Statewide; light dorsal stripe and prominent cranial crests.

Canyon Treefrog, *Hyla arenicolor*: Southern Utah; distinct toepads; lacks eyestripe; pattern varies from unicolor to blotched or spotted.

Pacific Chorus Frog, *Pseudacris (Hyla) regilla*: Extreme Northwestern Utah; toe pads and bark eyestripe present.

Western Chorus Frog, *Pseudacris triseriata*: Mountains through central Utah and the Uintah mts.; without distinct toepads; pattern varies; but usually striped.

Bullfrog, *Rana catesbeiana*: Statewide; large frog without dorsolateral folds; conspicuous ear drum with a fold around it.

Green Frog, *Rana clamitans*: Weber County; prominent dorsolateral folds; conspicuous eardrum.

Relict Leopard Frog, *Rana onca*: Extreme Southwestern Utah; indistinct dorsolateral folds end well before groin; some spotting. If you see this species contact the U.S. Fish & Wildlife Service, (801) 975-3630; or UtAH, (801) 752-0297.

Northern Leopard Frog, *Rana pipiens*: Statewide; distinct dorsolateral folds; oval or round dark spots with pale borders.

Spotted Frog, *Rana pretiosa*: Two isolated populations; one along the Wasatch front from Ogden to Utah Valley to the Heber area; the other is in the western desert; varying numbers of spots with indistinct borders and light centers; light jaw stripe.

Lowland Leopard Frog, *Rana yavapaiensis*: Extreme southwestern Utah; dorsolateral folds usually broken into short segments towards rear and angled inward; small tubercles on skin; dark network on rear of thighs. If you see this species contact the U.S. Fish & Wildlife Service, (801) 975-3630; or UtAH, (801) 752-0297.

Plains Spadefoot, *Spea [=Scaphiopus] bombifrons*: Southeastern Utah; prominent; hard bump between eyes; wedge-shaped spade on each hind foot.

Great Basin Spadefoot, *Spea [=Scaphiopus] intermontanus*: Statewide except for Southeastern Utah; glandular bump between eyes; wedge-shaped spade on each hind foot.

New Mexico Spadefoot, *Spea [=Scaphiopus] multiplicatus*: Southeastern Utah from about Green River south; no bump between eyes; elongate spade on each hind foot; copper-colored iris.

Return form to: UtAH, 195 West 200 North, Logan, Utah 84321-3905.